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AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An image sensor comprising:

a plurality of pixels formed in a semiconductor substrate, each pixel including a light

sensitive element;

a micro-lens over each of said light sensitive elements; and

a raised ridge structure surrounding each of said micro-lenses, wherein said raised

ridge structure has a triangular cross-section and at least partially supports

said micro-lens.

2. (Original) The image sensor of Claim 1 wherein said raised ridge structure is

circular.

3. (Currently Amended) The image sensor of Claim 1 wherein said raised ridge

structure has a triangular cross-section confines said micro-lens.

4. (Original) The image sensor of Claim 1 wherein the micro-lenses are formed

from polymethylmethacrylate (PMMA) or polyglycidylmethacrylate (PGMA).

5. (Currently Amended) The image sensor of Claim 1 wherein said raised ridge

structure has a height on the order of about 0.2 microns.

6. (Original) The image sensor of Claim 1 wherein said raised ridge structure is

formed from the same material that underlies said micro-lenses.

7. (Original) The image sensor of Claim 1 further including a color filter layer

between said micro-lenses and said light sensitive elements.

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- 8. (Currently Amended) A pixel of an image sensor comprising:
- a light sensitive element formed in a semiconductor substrate;
- a micro-lens over said light sensitive element; and
- a raised ridge structure surrounding said micro-lens, wherein said raised ridge structure has a triangular cross-section and at least partially supports said micro-lens.
- 9. (Original) The pixel of Claim 8 wherein said raised ridge structure is circular.
- 10. (Currently Amended) The pixel of Claim 8 wherein said raised ridge structure has a triangular cross-section confines said micro-lens.
- 11. (Original) The pixel of Claim 8 wherein the micro-lens is formed from polymethylmethacrylate (PMMA) or polyglycidylmethacrylate (PGMA).
- 12. (Currently Amended) The pixel of Claim 8 wherein said raised ridge structure has a height on the order of about 0.2 microns.
- 13. (Original) The pixel of Claim 8 wherein said raised ridge structure is formed from the same material that underlies said micro-lenses.
- 14. (Original) The pixel of Claim 8 further including a color filter layer between said micro-lens and said light sensitive element.
- 15. (Currently Amended) A method of forming a pixel of an image sensor comprising:

forming a light sensitive element in a semiconductor substrate; forming a top planarizing layer over said light sensitive element; Application No. 10/603,729 Docket No.: 396118015US

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forming a raised ridge structure over said top planarizing layer, said raised ridge structure encompassing said light sensitive element; and

forming a microlens within the interior of said raised ridge structure and over said light sensitive element, wherein said raised ridge structure has a triangular cross-section and at least partially supports said micro-lens.

- 16. (Original) The method of Claim 15 wherein said raised ridge structure is formed in said top planarizing layer.
- 17. (Currently Amended) The method of Claim 15 wherein said raised ridge structure has a triangular cross section confines said micro-lens.
- 18. (Original) The method of Claim 15 wherein said raised ridge structure is a closed shape.
- 19. (Original) The method of Claim 15 further including forming a color filter layer between said micro-lens and said light sensitive element.